

Blending In On The Great Barrier Reef



Diving beneath the surface of the Pacific with the Daring Duo, Chris and Martin, you begin to appreciate another side of the creature world: All those strange and weird-looking creatures living together, doing their own thing!

This activity takes you into that world. What if you could live underwater along the Great Barrier Reef? What would you look like? How would you protect yourself? Some creatures use camouflage — disguising oneself to blend into the background — as a survival strategy. Your mission is to create an underwater version of yourself or an entirely new creature, if you like.

The game is this: camouflage your creation and challenge your friends to find it — kind of like a water world "Find Waldo."

MATERIALS

- drawing paper
- markers, crayons, paints, etc.
- scissors
- glue (optional)
- index card or small sheet of writing paper

HERE'S HOW TO GO ABOUT IT:

- Decide on the shape, size, color and markings of your creature.
- On a large sheet of drawing paper, create your underwater environment. Outline rocks, coral, plant life, shipwrecks, seaweed — whatever you fancy.
- Fill in this scene with the markings and coloration of your creature.
- Now draw your creation on another sheet of paper and fill in with the same markings and colors.
- Cut out your creature.

- Make two vertical slits in your underwater scene. Thread your creature in and out through the slits. You can glue your creation in place or leave it loose.

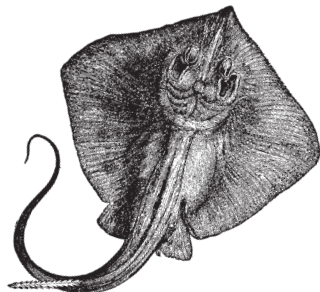


Now for the **CREATURE CHALLENGE**: Ask a friend to stand back from your underwater world and identify your special creature.

Finally, on the index card, write down your reasons for designing your creature as you did. Make a copy and

take a photo of your scene. Send both to:

Earth Creatures
16 Spencer
Warren, NJ 07059



It's Too Crowded Around Here!



Coral polyps built the Great Barrier Reef. The Great Barrier Reef wasn't built by one coral polyp alone. It took thousands of coral polyps to build the greatest construction on Earth.

Can humans duplicate the building activity of an average coral community? Gather a dozen or so youths for the following learning activity. It'll be crammed with fun.

MATERIALS

- several hoola hoops (string or ropes, if hoops are unavailable)

"ROOTS" OR "TENTACLES"

Coral polyps and other organisms must fight for space in the complex environment that they continually are creating. Coral larvae need a hard surface on which to attach themselves. Once the baby polyps have settled, they grow into adults and multiply and multiply and multiply. Eventually, there are so many polyps that they are growing right next to each other, on top of each other . . . anywhere they can find a place to latch on!

ACTIVITY

Get your kids ready to become actors! They will portray coral polyps as no one before them has ever portrayed coral polyps! As dramatic coach, place one hoop on the floor in the center of the room. It is the coral polyps' home base, a hard surface in the midst of a sand flat hundreds of feet underwater.

Choose a few polyp-designates to settle inside the hoop. They can sit or position themselves however they wish. Gradually add more polyps to the hoop, explaining to your actors

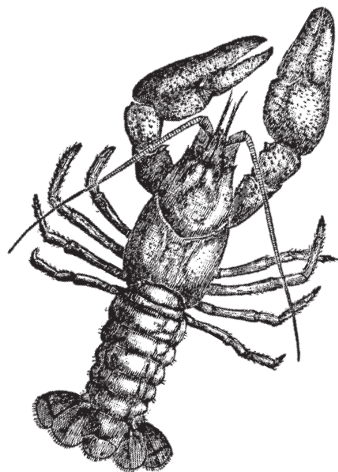
that the coral colony is now multiplying. As more and more polyps take up residence inside the hoop, remind your coral Thespians that one way real coral polyps adjust to space requirements is by straightening up. Encourage the youths to raise their

arms like tentacles swaying in the currents, waiting for some delicious munchie to float by.

When the circle is packed as tightly as possible (or appropriate), ask your coral polyps for their thoughts on how real polyps would continue building their

community. Would the colony get denser, expand upward or encroach on neighboring colonies?

If your actor-polyps want to continue, place additional hoops next to the first colony. Polyps on the outer edges can gently float over to encroach or colonize the new area. And the actors waiting in the wings can have their chance to be polyps. Who knows, you might have the next Brad Pitt or Drew Barrymore among your polyps!!



The Great Barrier Reef Word Search



Coral polyps, the microscopic creatures that built the Great Barrier Reef, are a lot like the letters of the alphabet. Letters build words and words build sentences. And in a few thousand years, you have language (or a 1250-mile-long coral reef)!



Like the denizens of the deep, letters — or words — can hide. Look at the word search below. Find and circle the 20 words that Chris and Martin have camouflaged against the alphabet-soup wall. Don't be fooled — the words can be horizontal, vertical, diagonal or backwards.

MATERIALS

- pencil



Word Search

Word List

- ANEMONE
- CAMOUFLAGE
- CARNIVORES
- CORAL
- CRAB
- CRAYFISH
- EEL
- GREATBARRIERREEF
- HERBIVORES
- JELLYFISH
- LIONFISH
- CLOWNFISH
- POLYP
- PUFFERFISH
- RAY
- SCHOOL
- SEACUCUMBER
- STARFISH
- TIGERSHARK
- TRUMPETFISH

P	B	V	S	H	K	T	B	A	L	W	N	N	D	P	U	V	B	J	C
F	E	E	R	R	E	I	R	R	A	B	T	A	E	R	G	Z	D	R	Q
S	E	D	W	A	C	R	P	U	R	F	Z	J	Y	G	V	U	A	Z	P
S	C	T	F	W	T	Z	G	V	H	F	T	P	M	F	A	Y	E	H	J
W	E	H	G	P	I	Q	P	H	S	Z	Z	R	B	R	F	H	E	C	H
O	Y	A	O	D	O	S	E	H	I	C	O	D	F	I	P	Z	A	F	S
O	A	Q	C	O	G	X	N	U	F	C	U	U	S	T	E	M	L	R	I
K	R	Z	B	U	L	L	C	P	Y	T	N	H	A	P	O	E	O	A	F
X	F	Y	N	H	C	B	N	R	L	O	E	Z	X	U	E	D	U	U	R
N	H	J	S	S	S	U	A	K	L	T	S	Y	F	M	S	L	L	M	A
K	L	M	E	I	J	I	M	K	E	H	J	L	L	A	R	O	C	R	T
R	I	E	R	F	Q	J	F	B	J	Y	A	V	M	T	B	F	G	H	S
A	O	M	O	T	T	H	F	R	E	G	O	W	N	C	Z	F	W	G	D
H	N	L	V	E	F	D	Q	U	E	R	P	C	M	C	G	F	Q	Y	R
S	F	X	I	P	F	U	B	Q	K	F	H	S	I	F	N	W	O	L	C
R	I	G	B	M	D	P	Y	L	O	P	F	W	P	X	T	K	A	D	C
E	S	T	R	U	Z	J	X	T	Q	Z	B	U	E	N	O	M	E	N	A
G	H	F	E	R	M	S	R	I	F	G	J	U	P	O	B	G	A	P	O
I	L	F	H	T	G	B	A	R	C	R	E	Z	J	X	M	E	G	Z	Q
T	X	N	C	A	R	N	I	V	O	R	E	S	H	T	C	N	T	Q	F



Tropical Reef Scavenger Hunt



Surgeons, butterflies, angels, parrots . . . what do they have in common? They're all names for fish, they're all part of one of the world's most incredible ecosystems, and they're all objects of the super scavenger hunt in the Tropical Reef Aquarium at Sea World of Florida.

MATERIALS

- pencil

There's an old expression, "One hand washes another," and that's how it goes on the coral reef. Polyps build the reef, then thousands of tiny plants float by, which attract plant-eating creatures, which, in turn, attract the carnivorous hunters. A reef provides homes to worms, sea stars, sea cucumbers and sea urchins. Shrimps, crabs, lobsters and other crustaceans seek protection from predators in the reef's crevices or between its coral branches. Sea anemones, the colorful relatives of coral, flourish and have symbiotic relationships with several kinds of fish. Naturally, fish play a vital role in the reef's food chain as both predators (like sharks and eels) and prey (like clownfish and butterflyfish). Then, there is the

parrotfish that nibbles on the corals for the algae within. And so it goes.

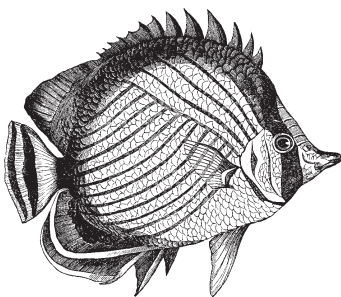
1. Proceed to the Tropical Reef Aquarium. Obtain a list of 13 types of animals found on a coral reef.



2. Check the list carefully so that you know what you are looking for. As you locate each animal, check the block on the form; indicate the color(s) of the animal; and the location where you found it (for instance, the main tank).

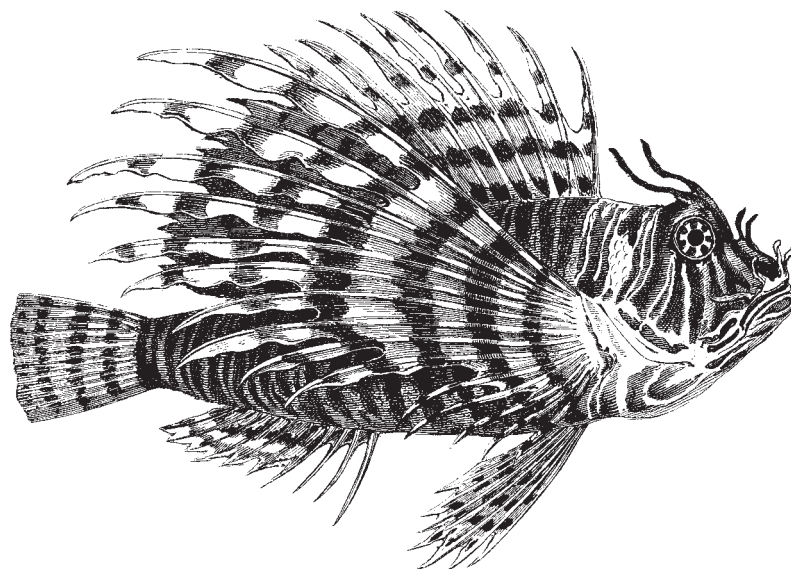
3. You may work together in a team to complete this activity.

4. After 30 minutes, return to the group and discuss your findings.



Tropical Reef Scavenger Hunt

Type of Animal	Present	Color(s)	Location
Surgeonfish			
Butterflyfish			
Wrasses			
Angelfish			
Damselfish			
Parrotfish			
Lobsters			
Clown Triggerfish			
Sharks			
Anemones			
Sea Horses			
Horseshoe Crabs			
Shrimps			



YOU DON'T HAVE TO BE A POLYP TO Build A Cool Coral Reef!



Here's a chance to revisit the site of one of Chris and Martin's most exciting, colorful, awesome adventures. It's Australia's Great Barrier Reef, and this time coral polyps aren't taking 17 million years to construct it. In a few, fun-packed hours, you can build a multicolored model complete with exotic creatures of the deep. Of course, your coral reef won't be 1250 miles long and the creatures will be made of foam, but your 3-D miniature will be a knock-out, a cool visual reference when discussing the coral ecosystem. Now, if we could just shrink Chris and Martin . . .

MATERIALS

Coral Reef:

- plaster of Paris
- plastic mixing container
- stirring spoon
- tempera paint (brown, green, red, yellow and blue)
- artist paint brush (one per youth)
- foam square: 1 in. thick, approximately 30 cm by 45 cm

Creatures:

- craft foam sheets (red, blue, green, gray, yellow, white and black)
- colored marking pens

Shaping tools:

- plastic spoon
- plastic knife
- paper clip
- scissors

1. First read the directions on the bag of plaster of Paris. Then mix a quantity of the powder with water. Make sure you use a plastic mixing container and plastic stirring spoon. You want to create a consistency that allows for easy molding. Remember that plaster of Paris hardens rapidly after it's mixed with water.

2. Place your mixture on the center of the foam sheet and mold it to form a coral reef. Use your shaping tools (plastic spoon, plastic knife, paper clip) to provide detail and give character to the reef. You are creating! Be imaginative! It's your coral reef!

3. Set your reef aside and give it time to dry.

4. While the plaster of Paris is setting, select the colors you want to paint your reef.

5. What creatures do you want living in and around your coral neighborhood? Select as many as possible from the episode and from

previous activities to make your reef realistic. You'll also want to show the diversity of this ecosystem.

6. Cut out creatures from the craft foam. Make sure they are the right size! Use the marking pens to add character.

7. Once the reef is dry, paint it, adding details that you have observed from the "Polyp Power" episode.



8. Add your creatures to the diorama.
Congratulations! Your diorama is complete.

9. It's time for show-and-tell. Show your model of the Great Barrier Reef and tell about the wonderful biodiversity of life forms in this amazing coral reef ecosystem. Cool!

